

Flowchart of the invention process

"Experimental" targets (1)

Cells
 ↓
 Enrich for antigen binding cells
 Enrich for specific cell population
 ↓
 Extract DNA or RNA
 ↓
 Label specific for target encoding

Probe set (2)

Probes design
 ↓
 Probes manufacture
 ↓

Probes immobilized as an array

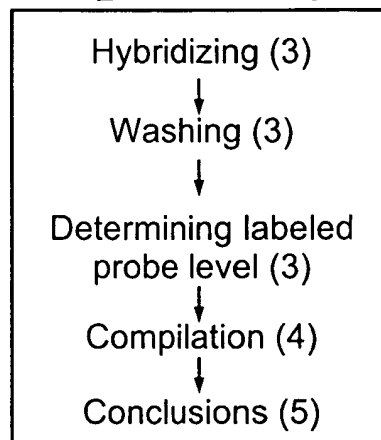


Fig. 1

Illustration of the variable region gene and an example of overlapping positively labeled probes

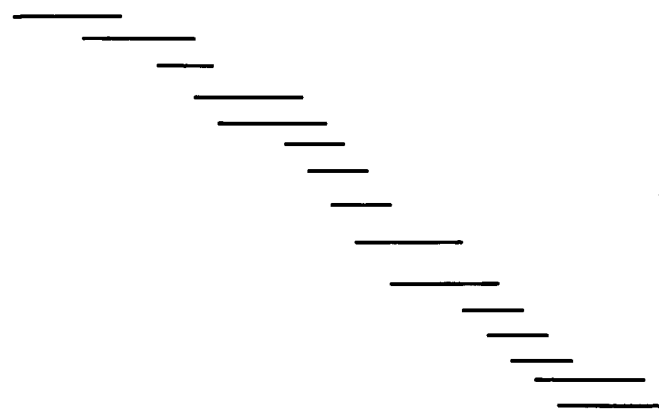
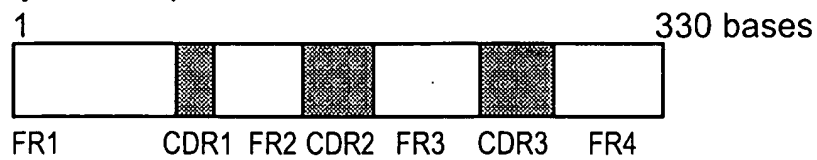


Fig. 2

Examples of multiple sample experiment. The probe arrays represented have the same content.

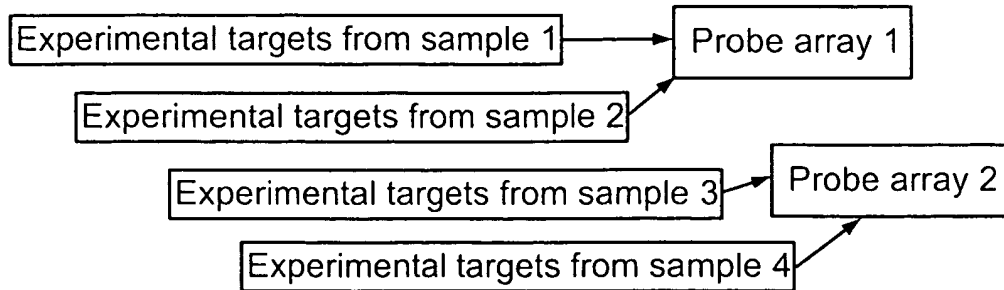


Fig. 3a

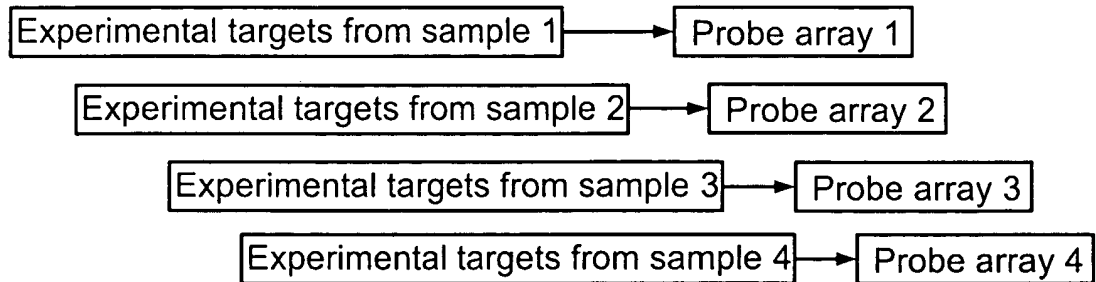


Fig. 3b

Scheme illustrating end labeled plus and minus strand

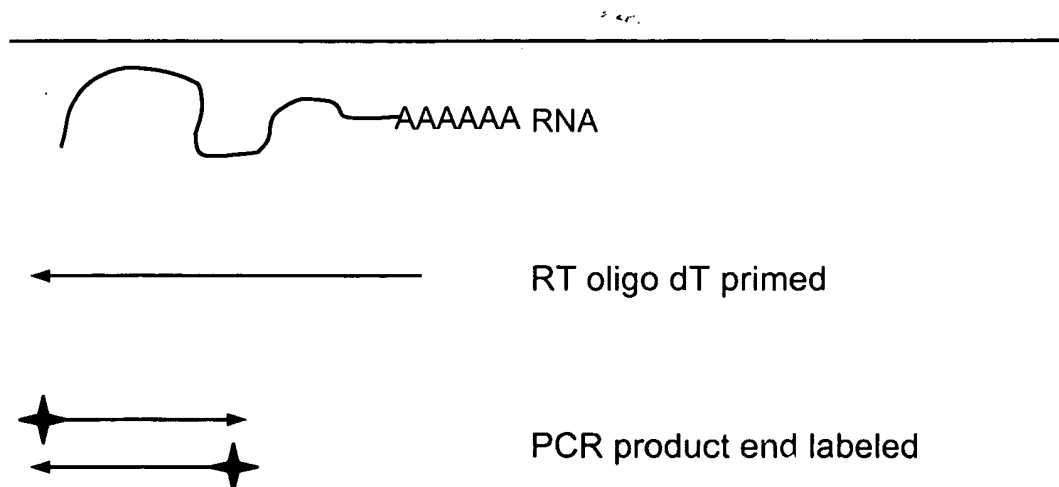


Fig. 4

Scheme illustrating PCR amplification of specific regions within the target sequence.

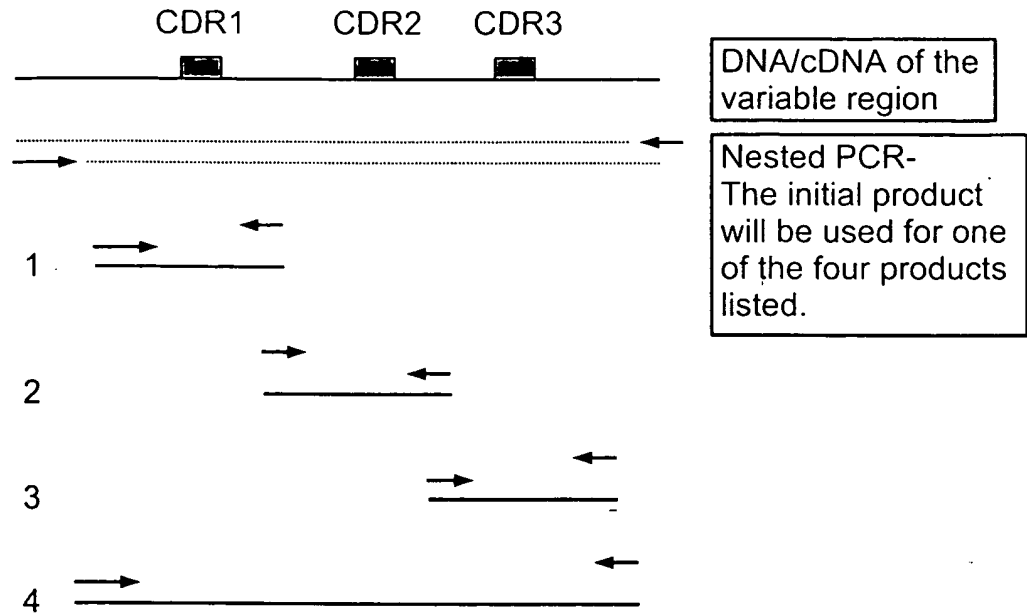


Fig. 5

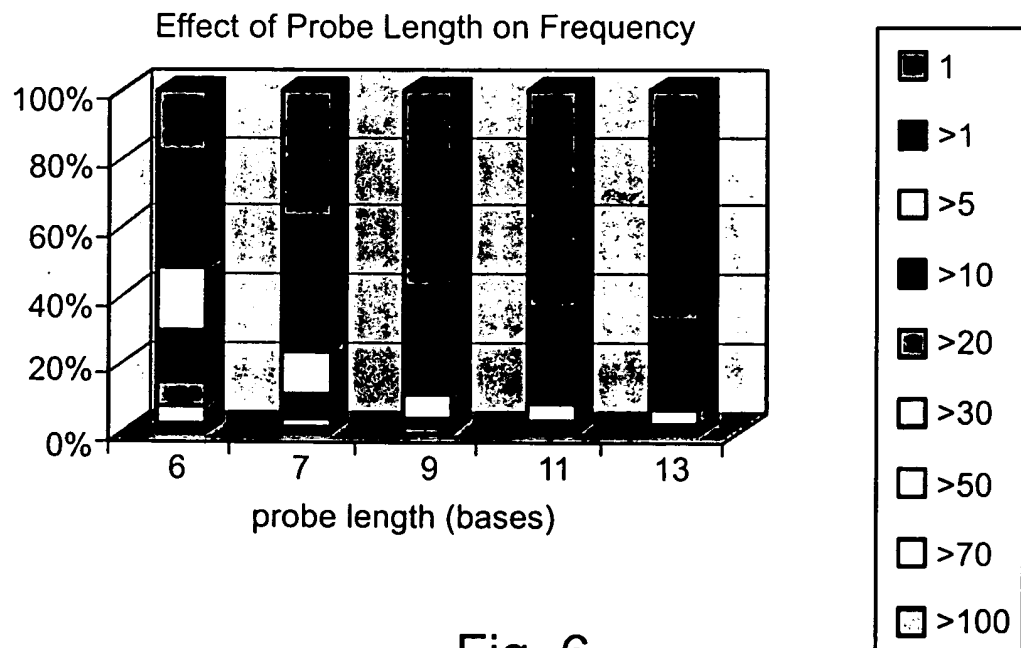


Fig. 6


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VH3-64      GAGGTGCAGCTGGTGGAGTCTGGGGAAGGCTTGGTCCAGCCTGGGGGGTCCCTGAGACTC      60
GI|23320665|GB CAGGTGCAGCTGGTGCAGTCTGGGGAGGCGCTAGTCCAGCCGGGGGGTCCCTGAGACTC      60

VH3-64      TCCGTGTCAGCCCTCTGGATTACCTTCAGTAGCTATGCTATGCACGTGGGTCCGCCAGGCT      120
GI|23320665|GB TCCGTGTCAGCCCTTTGGATTCAACTTCAGTTCCTATGTTATGCACGTGGGTCCGCCAGGCT      120

VH3-64      CCAGGGAAGGACTGGAATATGTTTCAGCTATTAGTAGTAATGGGGTAGCACATATTAT      180
GI|23320665|GB CCAGGGAAGGACTGGAATATCTTTTCAGCGATTAGTAGTGATGGAGAGACAACATATCAT      180

VH3-64      GCAGACTCTGTGAAGGCGAGATTACCAATCTCCAGAGACAATTCGAAGAACACGCTGTAT      240
GI|23320665|GB GCAAACTCTGTGAAGGCGAGATTCCAGCTCCAGAGACAATTCGAAGAACACACTGTTT      240

D3-22      300
VH3-64      CTTCAAATGGGCAGCCTGAGAGCTGAGGACATGGCTGTGTATTACTGTGCGAGAGA      296
GI|23320665|GB CTTCAAATGGGCAGCCTGAGAACTGAGGACGTGGCTGTCTACTACTGTGCGAGAGATCG-      299

D3-22      360
JH3      ATTACTATGATAGTAGTGGTTATTACTAC      31
GI|23320665|GB -TTACTATGAGACTAGTGGTT-----CCAATGCTTTTGATGTCTGGGGCCAAGGAACA      351

JH3      420
GI|23320665|GB ATGGTCACCGTCTCTTTCAG      49
ATGGTCGTCGTCCTCTTCA      369

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Fig. 9